PROCEEDINGS OF THE NEW YORK ENTOMO-LOGICAL SOCIETY

Meeting of May 21, 1935

A regular meeting of the Society was held on May 21, 1935 in the American Museum of Natural History; President Schwarz in the chair with twenty members and eighteen visitors present.

Mr. Hall presented the treasurer's report, as follows:

On hand January 1, 1935 \$755.21 On hand May 1, 1935 822.50

Mr. Pierre Noël, formerly with the Service Technique d'Haiti, was introduced to the Society. Mr. Noël said a few words in English, and then, on being urged, continued in French to say that he was glad to be present at the meeting and to be able to exhibit his insect portraits to the Society. The portraits exhibited by Mr. Noël were exceptional for their clarity, faithful reproduction and color.

Mr. Davis exhibited specimens of cicadas used in preparing his paper on "New Cicadas with Notes on North American and West Indian Species," published in this Journal, 1935. Mr. Davis discussed the peculiarities of the specimens from the various islands of the West Indies; the inverted S on one insect and the Kaiser's helmet on the pronotum of another, which would probably cause Hitler to destroy the whole collection. Formalin for preserving colored insects, except those that are any shade of red, has been found, by Mr. Davis, to be the best medium to use. Mr. Davis mentioned the efficacy of a bean shooter, equipped with a bag of shot, in bringing down cicadas.

Mr. Nicolay was called on next. His excuse for continued absence from the meetings of the Society lay in the fact that he has become more interested in collecting insects while the programs of the Society meetings are tending more and more toward an interest in their extermination! He would, however, gladly accept from the members any advice on collecting during August in Newfoundland. This was freely given. Mr. Nicolay then went on to state that he had done some spring collecting at Lake Greenwood on April 28 and had found the orange tips in their prime; also the cicindellids were plentiful. He had been disappointed in the collecting at Mt. Piscah in North Carolina in the fall of 1934.

Mr. Heineman, another member, seldom present at the meetings, said he had spent several weeks in Florida in March. At De Leon Springs, he observed a field literally alive with Papilio and had taken seven different species there.

During the spring, Dr. Curran had taken two Diptera new to New York State. He had also observed a cicindellid burrowing in the sand.

ELIZABETH S. ENGELHARDT, Secretary.

Meeting of October 1, 1935

The meeting was called to order at 8:15 P. M., with President Schwarz in the chair. There were twenty-eight members and guests present. In the absence of the Secretary, Dr. Ruckes was asked to act in that capacity, protem.

Dr. Melander gave a résumé of his 22,000 mile tour through the National Parks and Forest Areas of the Rocky Mountains and West Coast. He collected approximately 20,000 specimens, or about one per mile of his trip. The trip was made by car and trailer; the winter was spent at Riverside, Cal., which Dr. Melander described as an entomological paradise. The entire trip took fifteen months.

Mr. Davis reported on a camping trip he made in Cape May County, New Jersey, during which time he studied the song of *Tibicen latifaciata* to determine the difference between this cicada and *T. winnamanna*. The former sings only in the full daylight while the latter's singing period always extends into the evening. He also reported the expected appearance of his new species of cicadas, specimens of which he offered as exhibits.

Dr. Ruckes, speaking for himself and Dr. Klots, gave a résumé of an 8,000 mile trip to collect on the higher peaks above timberline in New Mexico, Colorado and Wyoming.

Mr. Kisliuk explained how new pests might be introduced through the importation of large quantities of foreign crops when our native crops do poorly. This was true for 1935 when the country had to import enormous quantities of broom corn, principally from the Argentine.

Mr. Crawford reported a new project in studying thrips of New York City. During the summer sixty-five out of the ninety-five recorded species for the state were discovered within the boundaries of the city. It was furthermore discovered that thrips have piercing rather than rasping mouth parts and are therefore potential vectors for plant mosaics, just as much as are the Hemiptera.

Mr. Hall made a trip to New Hampshire, collecting on the higher hills and procured specimens of *Brenthis montinus* Scudder.

Mr. Notman spent part of his summer, as usual, in New England and in Washington, D. C. While collecting on Mt. Desert Island he procured specimens of *Cicindela sprada* which is probably a valid geographically variety of C. limbalis

Dr. Moore stated that he had poor success in raising insects this summer in view of the fact that the humidity was too high and most of his live stock became moldy.

Mr. Moennich, collecting at Alpine, N. J., recorded the abundance of carabid beetles, which otherwise are only occasional in this locality. *Calosoma scrutator*, *C. wilcoxi* and *C. frigidum* were found in appreciable numbers.

Mr. Comstock stated that he had begun work as Curator of Arthropoda in the Newark Museum during the summer. He reported progress and increasing interest in his new undertaking.

Mr. Forbes remarked upon his beginning studies in Entomology under

the tutelage of Dr. Hungerford at the University of Michigan Biological Laboratory.

Mr. Blanton retraced Dr. C. W. Johnson's trip through New England collecting Tachinidæ and Syrphidæ. He was fortunate in procuring most of Johnson's species from type localities. He spent some time studying the types of trypetid flies in the Museum of Comparative Zoology at Harvard. He obtained new records for Long Island, Rivellia sp. (Otididæ), Trupanea mevarna Walk., and Paroxyna sp. (Trypetidæ).

Mr. Farrelly and Mr. Bauer spent some time at Lakehurst and Montauk Point taking mutillids. The former is by far the better locality.

Mr. Schwarz told of his trip abroad. He visited the British Museum and as usual was cordially received by the members of the Entomology Department. He spoke of the attractive habitat groups that are on exhibit in the Zoological Gardens and the fact that the Gardens boast a house for the exhibition of invertebrates including insects.

HERBERT RUCKES, Secretary pro tem.

Meeting of October 15, 1935

A regular meeting of the Society was held on October 15, 1935 in the American Museum of Natural History; President Schwarz in the chair with thirty members and twenty visitors present.

The topic of the evening's discussion given by Mr. Schwarz and Mr. Huntington was "Collecting in the Cauca Valley of Colombia, S. A."

Mr. Schwarz described their trip from New York to Columbia, early in January 1935. They flew over the familiar buildings at Barro Colorado Island and over the Canal to Panama City. They entered Colombia at the seaport Buenaventura. The journey from the coast up into the Cauca Valley by train was an uncertain and delayed adventure, as is most train travel in Colombia. They were cordially received in the Cauca Valley and found that even the barefooted peons have the courtly manners of old Spain. The bathing facilities in this valley were most interesting and refreshing. A large font, known as the "Pila," is an integral part of many an open courtyard; the water pours out of a spout under which one can indulge in an invigorating shower bath. Historically the Cauca Valley is very old. Cieza de Leon was a member of an expedition through the valley in 1538 and, in the account of his wanderings, he describes one of the stingless bees found there, probably the first reference made to this insect in the literature of the Americas. Mr. Schwarz and Mr. Huntington found that weather conditions in the valley in January and February were not perfect for collecting. One hundred species of bees were taken of which one tenth were social bees, due, Mr. Schwarz believes, to the fact that these bees are more abundant in the American Tropics than in the Old World Tropics. Most of the ninety-three different species of beetles collected were flower visiting. Twenty-one families of Coleoptera were represented among the different species.

Mr. Huntington continued the narratives of Cauca Valley, illustrating his remarks with both moving pictures and colored slides of the trip and of the

Cauca Valley from Cali to Popayan. He showed pictures of numerous sites in and about the valley, including some of the charming old Spanish haciendas; animated scenes of a bull-fight, organized to raise funds for the carnival; glimpses of a tropical rain forest high up in the Andes; as well as scenes along the route from Cali to Popayan. Mr. Huntington's pictures gave the society a vivid idea of the rugged geography of this region of Colombia. They returned to New York early in March.

The meeting was then open to a general discussion of the addresses of the evening.

Mr. Kisliuk recalled his experiences in the public market of Buenaventura, where he found the native women entirely in control.

In speaking of the Diptera which Messrs. Huntingdon and Schwarz had brought from the Cauca Valley, Dr. Curran exhibited a specimen which, on first glance seemed to belong to the Syrphidæ. On inspection, however, it was found to be a new species of Xylocopoides, a genus known only on the coast of Brazil.

ELIZABETH S. ENGELHARDT, Secretary.

Meeting of November 19, 1935

A regular meeting of the Society was held on November 19, 1935, in the American Museum of Natural History with President Schwarz in the chair. Twenty-four members and thirty-five visitors were present.

Mr. George Rau of 647 Harrison Place, West New York, New Jersey, was proposed for active membership in the Society.

Mr. Davis exhibited a fine series of *Tibicen duryi* and *Okanagana magnifica* collected this past summer by Dr. Ruckes in New Mexico and Colorado. The largest of the Okanaganas were in Eastern Colorado, the farthest east that this species has been taken. These large cicadas are eaten with great relish by the Indians. Mr. Davis also showed an *Okanagana bella* taken in Eastern Colorado calling attention to the valve of the insect which was red, while specimens of the same species taken in Utah have a black valve. Mr. Davis then exhibited some curiosities: a female cactus-dodger, *Cacama dissimilis*, with a cactus needle protruding from the abdomen; an *Okanagana magnifica* which had flown against a pine needle, which was imbedded between the fifth and sixth abdominal segments; and a seventeen-year locust taken at West Point in 1911 which had mounted itself between the eyes on the sharp point of a flowering dogwood.

Dr. Spieth spoke on the data collected by him regarding the Journals published by various Entomological Societies and the cost of these Journals to the members of the Societies. It was agreed that although the cost of the Journal of the New York Entomological Society is not included in the member's dues, the average number of pages a year and the quality of the Journal compare favorably with those Journals of other Societies where the cost is included in the dues.

President Schwarz brought to the attention of the Society, for consideration, the recent discussion among members in regard to holding but one meeting of the Society a month. The reasons cited for this change in policy being that there would be better attendance of the members at the meetings, and the fact that there is an increasing difficulty in obtaining speakers for two meetings a month.

Dr. Ruckes moved that this matter be laid on the table for discussion until the next meeting.

President Schwarz then introduced the speaker of the evening, Dr. John Hendley Barnhart of the New York Botanical Garden. Dr. Barnhart's subject was "Plants as Insect Traps"; an abstract of his talk follows:—

All animal life is dependent, either directly or indirectly, on plant life; whereas no plants are entirely dependent on animal life for their subsistence. It is not known why a few plants have developed a very elaborate mechanism for the capture and digestion of animal life. These elaborate ensnaring mechanisms may be compared with a hollow trap in some cases, and in others with the spring trap which folds together, thus catching the animal. In the case of the hollow type, the cavities are invaginations of the epidermis, swollen leaf bases being the simplest form of this type. Lantern slides were shown of the Utricularia (Bladderworts) with their highly developed acidia or bladders lying under water. These aquatic plants capture a great many larvae especially mosquito larvae.

Pitcher plants are equipped with a large reservoir more or less covered by a hood or lid. Slides were shown of the Cephalotus of Australia; Heliamphora of South America; Sarracenia, the true pitcher plant, native to this continent; the Darlingtonia, California's pitcher plant, with the translucent hood to confuse the trapped insect; and Nepenthes, seen in hothouses, with the beautifully colored pitchers upright from the ends of the pendent leaves.

The "catch-files" use sticky surfaces to ensuare their prey. In this group, sticky areas are found near each node of the plant. There are tentacles on the leaves of the Sun-dew (Drosera) which close over the prey in the manner of slow-acting traps.

The aquatic Aldrovandia, common in parts of Europe, bears a striking resemblance in structure to the terrestrial Dionaea or Venus Fly Trap of this continent. In the opinion of the speaker, the sticky surface type of trap developed into the spring trap of the Dionaea. In this group, the spring trap reaches its highest development, the Venus Fly Trap operating with lightning-like rapidity.

ELIZABETH S. ENGELHARDT, Secretary.

Meeting of December 3, 1935

A regular meeting of the Society was held on December 3, 1935; President Schwarz in the chair with twenty-three members and thirteen visitors present.

Mr. George Rau of 647 Harrison Place, West New York, New Jersey, was elected an active member of the Society.

Mr. Henry Dietrich of 1086 North Broadway, Yonkers, New York, and Mr. Paul T. Richard of West Nyack, New York, and Mr. Werner Marchand of 114 East 18th St., New York City, were proposed for membership in the Society.

The matter of holding but one meeting of the Society each month, laid on the table at the preceding meeting, was brought before the Society.

Dr. Horsfall moved that the President appoint a committee to draw up an

amendment to the By-Laws to authorize the holding of but one meeting each month (excepting June, July, August and September). This motion was seconded and carried.

President Schwarz appointed Doctors Lutz, Curran and Ruckes to draw up such an amendment.

Dr. Lutz moved that the Secretary notify all members, through the Bulletin, of the amendment to be proposed and discussed at the meeting of December 17 and to be voted upon at the Annual Meeting of January 7, 1936. This was carried.

Mr. J. C. Crawford gave a talk on Thysanoptera titled "A general account of the Order Thysanoptera."

There followed a general discussion by Messrs. Weiss, Comstock, Schwarz, Blanton and others.

ELIZABETH S. ENGELHARDT, Secretary.

Meeting of December 17, 1935

A regular meeting of the Society was held on December 17, 1935, in the American Museum of Natural History; President Schwarz in the chair with twenty-two members and eleven visitors present.

The following were elected active members of the Socity: Mr. Henry Dietrich, 1086 North Broadway, Yonkers, New York; Mr. Paul T. Richard, West Nyack, New York; Mr. Werner Marchand, 114 East 18th St., New York, N. Y.

In the absence of Dr. Lutz, Chairman, Dr. Curran reported for the committee appointed to draw up an amendment to the By-Laws to authorize the holding of but one meeting of the Society each month (excepting June, July, August and September). The committee reported as follows:

Amend Article IV by omitting the word "first" from the second sentence, making that sentence read: "All of whom shall be elected annually by ballot at the regular meeting in January and shall hold their offices for one year or until others are elected in their places.

their offices for one year or until others are elected in their places.

Change section 1 of Article XVII to read as follows: "There shall be held one regular meeting of the Society each month from October to May inclusive at 8:00 P. M. on the third Tuesday of the month."

Dr. Curran went on to discuss the advisability of this proposed change in number of meetings from the viewpoint of:

- 1. Those working in entomology every day, who would, perhaps, prefer but one meeting a month;
- 2. Those whose only chance to discuss entomology is at the meetings of the Society and who would, therefore, prefer the continuation of the two meetings every month;
 - 3. Those who naturally enjoy the entomological discussions twice a month. Dr. Curran concluded his remarks by suggesting a round table discussion

of the collection and taxonomy of insects at one of the two meetings each month; and at the other meeting, a formal paper.

Mr. Davis expressed his approval of Dr. Curran's suggestion.

Dr. Horsfall stated that in his opinion the type of programs of the past created in collectors a feeling that the formal paper filled the period of the meeting too fully for any informal discussion of specimens. However, the instructive and more formal paper should be continued and Dr. Horsfall suggested that one or two members be appointed as the leaders of the informal round table meeting.

Dr. Leonard felt that a greater number of meetings during the year gives a greater opportunity for attendance by those members who are able to come only irregularly.

Dr. Ruckes stated that the average attendance of from twenty-five to thirty members is a great as can be expected and that the holding of but one meeting a month would, in all probability, not tend to increase this average attendance. In his opinion, the fifteen minutes for miscellaneous business intended for the discussion of insects during each meeting was a fallacy and had proved to be unsatisfactory. He stated that many members would not be satisfied with one meeting a month.

President Schwarz then appointed a nominating committee as follows:

Dr. A. L. Melander Ernest L. Bell John D. Sherman, Jr.

The speaker of the evening was then introduced. Dr. F. W. Metzger spoke on "Attractants for Insects with Particular Reference to the Japanese Beetle." Attractants may be divided into three groups, those of sex, those of light and those furnished by chemicals. Very little work has been done on attractants although the work with oriental fruit moths and other insects is increasing. Poison bait is used in scouting for insects and eventually will be used in collecting. Dr. Metzger then explained the use of geraniol, eugenol, and phenamethyl alcohol as attractants for Japanese beetles. Dr. Metzger illustrated his remarks on the development and use of the Japanese beetle trap with lantern slides. In closing, Dr. Metzger stated that, in his opinion, any insect can be attracted to a trap provided its background is known.

Following Dr. Metzger's paper there was a long discussion of its various aspects to which most all of those present contributed.

ELIZABETH S. ENGELHARDT, Secretary.